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## THE USE AND DEVELOPMENT OF AMERICAN WATERWAYS

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BY HONORABLE FRANCIS G. NEWLANDS,  
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Waterways Commission.

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The Inland Waterways Commission is the outgrowth of an agitation which has been conducted for some time, particularly in the Mississippi Valley, for the improvement of our waterways. The President was urged to exercise his constitutional power of making recommendations to Congress, and, pursuing his usual method of first exhausting investigation, appointed an executive commission with a view to gathering into one body a number of men who, either in legislative or in administrative work, had acquired experience in the problems relating to the waterways of the country.

### *Appointment of the Commission*

As chairman of this commission the President selected Honorable Theodore E. Burton, of Ohio, who, as the head of the Rivers and Harbors Committee of the House of Representatives, had discharged the duties of that important position with rare intelligence, thoroughness, and public spirit. He also appointed two United States Senators, Honorable William Warner, of Missouri, and the writer; another member of the House of Representatives, Honorable John H. Bankhead, of Alabama (the leading minority member of the Rivers and Harbors Committee of the House), who has since become senator; and five members of the executive department of the government. These scientific members are: General Alexander Mackenzie, Chief of the Engineers Corps of the Army; Dr. W. J. McGee, a scientist and naturalist connected with the Bureau of Soils in the Department of Agriculture; Mr. Frederick H. Newell, Chief of the Reclamation Service; Mr. Gifford Pinchot, Chief of the Bureau of Forestry; and Mr. Herbert Knox Smith, Chief of the Bureau of Corporations. The President reserved the right of adding to the commission, in the future,

certain transportation experts; and it is possible that the commission may, before its work is completed, take up in the broadest way the whole question of transportation.

*Purpose of Its Appointment*

The duty imposed upon this commission was to investigate the use of water, not only for navigation, but also for all other purposes, with a view to recommending to the President a full and comprehensive plan for the development and utilization of all the natural resources of the country relating to water. Its primary purpose was to facilitate water transportation, upon which the prosperity of the country so largely depends. We have been for some time engaged in the consideration of questions relating to railways and we are now about to enter upon the related question of waterways.

*Work Performed by the Commission*

Since its appointment the commission has been hard at work upon the problems assigned to it. An organization was effected in Washington, on April 29, 1907. Early in May the commission took a trip down the Mississippi River from St. Louis to the gulf and studied the problems of the lower part of that river. In September, a part of the commission visited the Pacific Coast and inspected the Sacramento and San Joaquin rivers in California and the Columbia River in the Northwest. Beginning September 21, the entire body started on a tour of the Great Lakes, embarking at Cleveland and ending at Duluth. Passing from Duluth to St. Paul by rail, the journey was resumed down that river on board a government boat and continued to Memphis, the President joining the party at Keokuk. After the Memphis convention, most of the members of the commission proceeded to Kansas City, and from that place made a tour of inspection down the Missouri River to its mouth. In these various tours, covering thousands of miles, daily meetings were held at which government engineers and other experts were examined and much testimony taken relative to the conditions and needs of the rivers.

Besides attending the convention at Memphis, the commission was also represented at the Irrigation Congress at Sacramento, California; the Transmississippi Congress at Muskogee, Oklahoma;

the Upper Mississippi Convention at Moline, Illinois; at the Atlantic Deeper Waterways Conference, in Philadelphia, late in November; the recent congress of the National Drainage Association, in Baltimore, and the National Rivers and Harbors Congress, in Washington, which closed a few days ago. On November 25, the commission again convened in Washington, and have ever since been busy considering their recommendations. The President, in his message to the First Session of the Sixtieth Congress, stated that he would transmit his recommendations regarding the waterways to Congress after receiving the report of the commission. The work thus far performed is highly instructive and important; but until their report is formulated and made public, what I shall say upon the subject must be regarded as only the expression of my individual views.

#### *Importance of the Subject*

The transportation question is the most important question of the day, and the reason that it has suddenly (and somewhat unexpectedly to many of us) become of such pressing importance just at this time is because the railway service of the country has practically broken down. Whilst the railway development of the country has astonished the world, and whilst we have to-day more than half the railway mileage of the world, yet that machinery has proven inadequate to meet the demands of the production of the country. Years ago the railways were competing with the waterways and practically drove them out of business. But the efforts of the railways to monopolize the carriage of cheap natural products, carried in other countries by water, has resulted in congestion of traffic and a virtual breaking down of the entire transportation system; and it is essential that we shall take immediate steps to supplement our railway system by a complete system of waterway transportation. Everywhere else in the world water transportation is an important factor in both domestic and foreign commerce. Germany has perhaps the most perfect system of transportation in the world. Her rivers have been artificialized from source to mouth and they are supplemented by a system of canal, rail, and ocean transportation which, combined, give that country a transportation machinery unequaled anywhere in the development of domestic and foreign commerce.

However much we may rely upon the railways for quick transportation of persons and of products, it is clear that the rivers should also be used; that they should be properly artificialized; that their beds should be made stable and their courses sure for the transportation of bulky merchandise. This class of traffic has long occupied too large a proportion of the available capacity of the railroads, to the detriment of other more valuable products and even to the injury of life and limb. Even the great railway managers, such men as Mr. Hill, Mr. Harahan, Mr. Finley, and others are urging the development of the inland waterways as supplementary to the railways. Only a few years ago Mr. Hill is said to have declared that water competition could not exist and that, if he were given the money with which to build a double-track railway beside the proposed enlarged Erie Canal, he would turn the canal into a lily pond. It will be remembered also that with regard to the Mississippi River he declared it could never be made an efficient instrument of commerce until its bottom had been lathed and plastered. But the views of these men are changing, and changing because they realize that their railways have been over-taxed and that they must either expend vast sums of money in their improvement or call in the aid of the waterways. Mr. Hill estimates that it will cost, within the next five years, I believe, five and one-half billion dollars to put the railroads in condition to meet the requirements of the country's traffic. This does not appear to be an over-estimate when we remember that the railroads of the country to-day are capitalized at about fifteen billion dollars, and that there is little double track, although every railroad in the country ought to be double-tracked.

### *A Comprehensive Plan Necessary*

I assume that the country will not be disposed to enter upon the work of improving the inland waterways unless a plan is presented which will fairly meet the requirements of the whole country. The movement represents a policy, not a project. It seems improbable that any particular river, such as the Mississippi, will be fastened upon and pushed forward, without some assurance that all the other rivers which require improvement will also be taken up under a comprehensive plan—one involving, ultimately, the highest possible development of all the waterways of the country. It was

doubtless with this thought in mind that the President appointed the commission, and it was doubtless with a view to the formulation of such a plan that he called in the members connected with the Engineer Corps of the Army, the Reclamation Service, the Forestry Service, and the Bureau of Soils. There is practically no difference of opinion, I apprehend, as to the desirability of improving the inland waterways of the country. The public attention is arrested and I never knew the people to be more interested or united. The important thing, now, is to give effective direction to this aroused public sentiment by explaining the true scope of the subject and the importance of scientific legislation for carrying out the comprehensive plans which, alone, will make the undertaking successful. It is possible that the whole question will not be solved for some time, for the reason that Congress rarely takes the initiative; it follows public opinion, rather than leads it. It is fortunate, therefore, that these questions are now being discussed in the various conventions and conferences held throughout the country, and it is important that every man who has a thought of value upon the subject should express it.

### *Scope of the Work*

It is impossible to enter, with hope of success, upon comprehensive plans for the improvement of our inland waterways, without taking into consideration the related questions of forest preservation and restoration, of the irrigation of arid lands, of the reclamation of swamp lands, of bank protection, of clarification of streams, and of other kindred matters.

It is necessary to preserve the forests of the country from the destruction which threatens them, not only because our timber supply is diminishing, but because forests are natural conservators of moisture and aid in the gradual distribution of the waters to the streams and rivers that flow into the lakes and the ocean. When an area of land is denuded of its forests, the waters falling upon it rush off in torrential streams, causing destructive floods and soil waste; but the forest absorbs moisture like a sponge and gives it out gradually to the springs and streams through the season of drought, thus aiding in the maintenance of a stable channel.

So also with the question of the irrigation of the arid lands on the headwaters of our inland rivers. The cultivation of the

vast areas on the upper reaches of the western tributaries of the Mississippi involves the construction of great reservoirs for the storage of water, which is caught while the snows are melting and later on let out through canals upon the plains, to meet the demands of the growing crops. These fertile plains drink up the moisture and become themselves great storage basins which return the water by seepage at the time when it is most needed for the maintenance of a channel in the navigable rivers below.

Thus, both forestry and irrigation are essential to the prevention of floods and of soil waste and to the maintenance of a stable channel for navigation—to say nothing of the vast money value or the great sum of human happiness involved in the possession of great forests and vast areas of productive irrigated plains. For the purpose of navigation it is of the very highest importance that there should be a stable channel, one of standard depth; not a variable channel, forty feet deep at one time and one foot at another; not a channel deep in one place and shallow in others owing to the interposition of shoals and quicksands; but one of standard depth, which will accommodate vessels of standard draft, just as there is a standard gauge for railroads. Anything which will retard the flow of the water during the period of flood and make it available in time of drought will, of course, increase the stability of the channel. And thus it is that the questions of forestry and irrigation become the first importance in connection with the problem of the inland waterways.

Few of us realize, as we ought, that the soil of our continent is being washed away and that the bottoms of the navigable rivers themselves are drifting slowly into the gulf and the ocean. The trouble with the Passes at the mouth of the Mississippi is that a great delta has been built up there, like the delta upon which the City of New Orleans stands, where there is now a depth of twelve hundred feet of alluvial soil which has been deposited by that river. It is not impossible that, in time, the gulf might be turned into a continent by this process.

Closely related to the prevention of soil waste is the matter of the clarification of streams; for every grain of sand in these rivers is a tool of destruction when directed against the river's banks, while clear water cuts the banks but little. The Yellowstone, as its name indicates, is pouring into the Missouri immense volumes of sand,

and the Missouri is pouring into the Mississippi vast quantities of alluvial deposits, every grain of which is both a tool for the destruction of the banks and an obstruction to navigation when deposited in shoals and sandbars. The rivers are also the sources of water supply for domestic purposes to cities and towns, and must be purified and made fit for consumption and kept clear of the filth and sewage of cities.

The reclamation of swamp lands must also be considered. Their reclamation means not only the addition of large and fertile areas to the productive resources of the country, but also the control of the streams themselves. These low lands lie at the foot of the rivers, whose waters naturally spread out wastefully in swamps and bayous. The channels fill up and become shallow because there is no current to carry away the sediment; but when confined in comparatively narrow channels by means of levees the water is thereby raised to a higher level and its current is quickened and becomes an efficient power for carrying away the sediment and scouring the bottoms of the rivers, and thus creating a channel of sufficient depth for the purpose of navigation. So that we have also inseparably connected with the question of navigation the related questions of swamp-land reclamation and bank protection.

All these uses of water are important; it is difficult to say which is the most important. But, assuming that the transportation of products is as important as their production, it is clear that for the proper development of our inland waterways we must embrace in one comprehensive plan the treatment of our forests, the irrigation of arid lands, the reclamation of swamp lands, and other related matters. In doing this, vast water-power can be developed, and this power must be saved from the control of trusts and monopolies and care taken to direct its use in the interest of the entire people. It is estimated that, on many of our navigable rivers, the power which can be developed in this way will be sufficient to pay the entire cost of the improvement of the streams.

#### *Can the Waterways be Restored?*

The outline which has been given, based upon the requirements of the Mississippi River, is merely an illustration of what is required on the Pacific Coast rivers and, in less degree, on the rivers of the gulf and the Atlantic Coast. The business question before



us is whether we can restore these waterways as a part of the efficient machinery for the country's transportation. Many doubt it, and I must confess that when I went down the Mississippi, last summer, and traveled for miles without seeing a single boat, I was inclined to doubt it, also. There were a few tow-boats, but the river towns were neglected, the wharves rotting, and the river fronts largely occupied by the tracks of the railroads, whose trains of cars, running at frequent intervals along the banks, showed how thoroughly they had absorbed the commerce of the region.

These conditions seemed to be due to two causes: The terrific competition of the railroads, which have made a practice of underbidding the waterways during the navigation season and afterward raising their rates; and also to the failure of the government to provide and maintain a stable, navigable channel. I am also of opinion that the railroads have been somewhat influential in obstructing legislation for the improvement of our waterways, but I believe they now see that this was a mistaken policy.

I have no doubt, myself, about the policy of restoring the commerce of our inland waterways, but I think it is likely to be a difficult task. One difficulty will be in providing facilities for assembling and distributing the products to be carried on the rivers. The terminal facilities at the towns on the rivers are now very poor, when they are not entirely in the hands of the railroads; and terminal facilities mean little in themselves unless the connecting lines of railroad are able and willing to take goods from the waterways and distribute them in the interior. The railroads have, as one of the chief elements of their strategic strength, the ability to assemble commerce in every part of the country and to carry it on cars of standard gauge to any other part of the country; whereas the river carriers are, at present, circumscribed in their efforts by the limits of the rivers themselves.

It is therefore necessary that the railroads shall be brought into the most intimate relations with the river carriers, so that the one system will supplement and aid, not injure, the other. We must broaden the area for water transportation, also, so that it can live, if necessary, upon the trade of the towns accessible by boat. The Ohio can be connected by canal with Lake Erie, the Mississippi with Lake Michigan, and so on; and we can connect the entire

Mississippi Valley, the Gulf Coast, and the Atlantic Coast with each other by a system of sheltered waterways along the gulf and Atlantic coasts, such as was so ably discussed at the Philadelphia conference, consisting of bays, sounds and rivers to be connected with each other by canals, such as the contemplated canal across Florida connecting the gulf with the Atlantic Coast, the canal connecting the Carolina sounds with Chesapeake Bay, the canal connecting Chesapeake Bay with the Delaware River, the canal connecting the Delaware River with the Raritan, and the canal across Cape Cod, thus giving a sheltered waterway from the mouth of the Mississippi to Maine, upon which it is possible that boats of standard draft could pass from Boston down the Atlantic Coast, across Florida to the Gulf Coast, and up the Mississippi River to the Great Lakes. If these things were done, and warfare between the railways and the waterways should continue, there would still be sufficient transportation, without the distributing aid of the railways, to constitute a very influential part of the commerce of the country.

But it will scarcely do to predicate the improvement of our waterways upon the continuance of this antagonism. A few weeks ago I was quoted in certain Ohio newspapers as saying that the appointment of the Inland Waterways Commission was a part of the "Big Stick" policy of the President. Besides the fact that I never made such a statement, I believe the contrary to be the fact, and that the President, like the commission, is working for greater harmony, not to stir up antagonism, between the different transportation systems of the country. My own view is that the waterway system ought to be largely supplemental to the railway system and that it may possibly become necessary, in the event of continued hostility on the part of the railways toward the waterways, to enforce a liberal system of interchange of traffic and use of facilities between the two.

Viewing transportation in the large, it is of the highest importance that its machinery should be so adjusted that the common carrier can make the best and cheapest possible use, in the interest of the public, of all the public highways—of river, of railway, and of ocean. A perfect system of transportation would involve but one control from shipper to consignee, and our aim should be a system that will create great corporate carriers, under proper

regulation and control, owning railway lines from the Atlantic to the Pacific and from the lakes to the gulf, owning steamboat lines on the rivers and lakes wherever practicable and economical, and also owning great lines of ocean steamers, so that rates can be made and goods be carried from any point in this country to any other point in this country, or to a foreign country, under a single control and at a single rate, and that rate the lowest one consistent with good service and reasonable profit.

### *Legislative Requirements*

Having said this much upon the physical requirements of the problem, let us consider what legislation is necessary in order to carry the undertaking into effect. And here the greatest difference of opinion is likely to exist; for while the country is practically united as to the necessity of undertaking the work, the machinery for setting it in motion has not been carefully considered and already there is divided counsel. It has been thought in the past that our government was incapable of engaging successfully in any great constructive work. This belief has been entirely disproved by the great works begun and continued under the direction of the Reclamation Service and the Panama Canal Service. In the legislation inaugurated for these public works Congress very wisely gave a free hand to the Executive, with the result that by a process of evolution a great administrative organization has been built up in each service, that has been conducted on thoroughly business-like principles. In a bill which I have recently introduced in the Senate (Senate Bill 500), I have endeavored to follow that beneficent legislation, by putting the whole responsibility for the development of the waterways of the country upon the Executive, whoever he may be, conscious that we will never have a dishonest Executive and that his highest pride will be to carry out successfully and economically the great charge entrusted to him. To put the Executive in a legislative strait-jacket would be sure to result in inefficiency and failure.

### *Inland Waterway Fund*

The most important feature of this bill is the creation of an inland waterway fund, to be used both for investigation and construction. The sum of fifty million dollars is by the bill reserved

and set aside as such fund, and the President is authorized, whenever the fund is reduced below twenty million dollars, to make up the deficiency by issuing and selling bonds up to the amount of fifty million dollars. Thus the fund is always kept full, even though Congress should fail to make appropriations. The President is authorized to have examinations and surveys made for the development of the inland waterways of the country and for the connection of such rivers with each other, or with the Great Lakes, by connecting and by coastal canals. In order to enable the President to make such examination and to enter upon works found to be practicable, he is authorized to appoint an inland waterways commission, and to bring in co-ordination therewith the scientific services of the country, such as the Corps of Engineers of the Army, the Bureau of Soils, the Forest Service, the Reclamation service, and the Bureau of Corporations; and to appoint such experts and boards in connection therewith as he shall deem advisable; and to fix their salaries until the same are fixed by Congress. The commission is required to make reports to the President and to Congress, or to either body of Congress, whenever information is required.

### *Construction*

The next question is as to construction. Under this bill, the President is authorized, whenever a project is determined by the commission to be feasible, to enter upon the immediate construction of the works and to let contracts for the execution of the same, in whole or in part; the only limit upon his power being that the necessary money for the payment of the contracts must be in the waterway fund when any such contracts are let.

It will be observed that the initiative, both as to examination and as to actual construction, is put in the hands of the Executive Department as an administrative matter. It is clear that the judgment of a board of experts will be very much better than that of Congress upon such matters, and that much delay and confusion will be saved by authorizing the prompt initiation of the work. Otherwise, we shall have difference of view, both in committees and in Congress itself, as to the details of the work, as to the relative importance of the projects, and sectional differences will arise, only to be compromised by concessions harmful to this great movement. Congress should exercise the fullest power of exam-

ination and of criticism, and, of course, it has the power at any time to change the organization or to stop the work. All these powers should be exercised whenever wise and necessary; but the main purpose of the bill is to enter upon the work in a business-like way, just as a private corporation would do, and not to impair its proper administration by unnecessary legislative restraints, or by the breaks and interruptions in the continuity of the work which have proven so disastrous heretofore when Congress has failed to continue to make the necessary appropriations.

The bill also provides for co-operation with states, municipalities, communities, corporations, and individuals with reference to such collateral works as have been suggested, and for an equitable distribution of the costs and benefits. Wherever practicable, compensation to the fund is to be secured by the conveyance of reclamation rights, the lease of water power, and such other means as may be beneficial to the states, municipalities, communities, corporations, or individuals affected. Equitable apportionment of the work among the several waterway systems of the country is also enjoined by the bill. It is intended that work shall be commenced contemporaneously among the different systems of the country, so that no section may feel that another section is being favored at its expense. The bill is tentative in its nature and designed to provoke discussion and to aid in the framing of a more perfect measure.

### *After Construction, What?*

After these waterways are developed they must, of course, be freely used by the people; but their use will necessarily involve the creation of common carriers under laws either national or state. The business of common carriers is not, in these days, engaged in by individuals; the creation of artificial beings called corporations is necessary for this purpose. It is clear that the transportation of these waterway carriers will be interstate and foreign, and therefore subject to national regulation and control. The nation should itself create these corporations, and it should supervise their capitalization, control their profits, and make them the obedient servants of the people. At the same time it should protect them against the destructive competition of the railways. The nation ought not to allow one public servant (the railway company)

to destroy another public servant (the waterway company), both engaged in conducting traffic on the public highways of the country. It might, in order to encourage the operations of the waterway companies, exempt them for a period, as national instrumentalities, from taxation either national or state. These questions should be taken hold of at the start with a strong hand and the organization of the water carriers should not be left to the laws of the different states. We should not drift into confusion on this subject as we have regarding our railways.

### *National Incorporation of Carriers*

The demand for national action as to water transportation will lead to national action regarding rail transportation and finally necessitate the creation by the nation of the corporations which are to handle both classes of traffic. We must begin to realize that three-fourths of the transportation of the country is now interstate; that our railroad systems are being operated regardless of state lines; that regulation by the individual states operating here and there on the sections of these great systems lying within their boundaries is disjointed, illusive, and illogical; that complexity, confusion, and insecurity, both to investors and shippers, are the results of the present system.

The truth is, we have not yet begun to think or act scientifically on this subject, but have allowed ourselves to drift, and the present railway system in this country may be called an accidental growth. The first railroads were built from a point in one state to another point in the same state, and their commerce was at first purely state commerce; but the railroad corporations, at first organized for the transportation of state commerce, gradually developed into great interstate systems, composed of many railroads combined under the laws of a single state, and that, oftentimes, a state entirely foreign to the region in which the system operates. In this way, six thousand railroad companies gradually came into existence, of which less than two thousand are now operating roads, the others having been merged into them; and of these two thousand, almost the entire mileage—at least 170,000 out of a total of 220,000 miles—is merged in eight or ten great systems, each controlling from ten to fifteen thousand miles of track and operating in from ten to fifteen different states. So that the growth

which began as a purely state growth became, by a process of evolution, a national growth; and it is no longer a question whether the railroads shall be nationalized—for they long ago nationalized themselves,—but merely a question whether we shall continue to permit the lesser sovereignties to assume the function which the nation has neglected of creating its own agents for the transportation of interstate and foreign commerce.

### *The National Powers*

We cannot take the broad view of the powers of the national government as relating to waterways and carriers by water and refuse to recognize those powers as relating to railways and carriers by rail. It is curious how united public sentiment is as to the national control of the waterways and how divided it seems to be as to a similar control of the railways.

We have now forty-six sovereign states, each absolutely sovereign in all matters of local legislation, and each absolutely subject to another sovereign, the Union of the States, as to all matters entrusted by the Constitution to that Union. The main purposes of creating this sovereignty called the United States, were two: The national defense, and the regulation of interstate and foreign commerce. The regulation of interstate and foreign commerce involves necessarily the selection of the instrumentalities of that commerce, and necessarily, also, the selection of the public servants that are to engage in such transportation. The nation should itself create the great corporations which are to engage in interstate transportation by both water and rail. The reason the nation should frame the incorporation act under which great mergers are to be made is that we must prevent over-capitalization and we must limit their profits. If the nation is to permit a state to create the public agents which are to do the nation's business, it should control the legislation of that state; and that, of course, is neither desirable nor possible.

The purpose of the constitution was not to centralize government, but to unionize government, where the general welfare was affected. We unionized the quarantine, because we realized that disease had no respect for state lines; we unionized irrigation, because nature failed to place the rivers entirely within state boundaries; we unionized banking, because the interest of the entire people

required one money, a common denominator acceptable everywhere, and a system of exchange inviting universal confidence. And all the reasons which led to the unionizing of these functions of government in the past exist in far greater and stronger degree, at this time, with reference to the unionizing of the subject of transportation. We have just reached the threshold of this great question, and it is very important that we shall start right by the nation's creating its own public agents, and not permitting an inferior sovereignty to do so.

### *Mergers Necessary*

We should drop excitement, reprisal, and retaliation, and get down to the question whether these mergers shall be broken up and resolved into their original elements of purely state railroads, or whether consolidation, properly controlled, shall be permitted. I think all thoughtful men will agree that the mergers of the railways are necessary to the proper development of the transportation system of the country, and that the fullest powers of combination should be exercised, under proper restraint as to capitalization, rates, and profits. To break up these mergers and resolve them into their integral parts, bounded and circumscribed in their operations by state lines, would be a national calamity, if it could be done, as grievous to the public as to the railroads. Leaving out of consideration, for the present, the combination of competing lines, these mergers have been of immense service to the country, although the machinery for bringing them about has been most complicated. The thing complained of is not the fact of combination, but the methods of combination, unrestrained by adequate laws and fruitful of over-capitalization, frauds on stockholders and frauds on shippers.

It is a universal experience that whenever the laws of a country do not meet its economic requirements the people will violate the laws or evade them. That is what has occurred in the case of the railroads. The ingenuity of all the corporation lawyers of the country has been exercised in order to promote the combination of single roads into systems. Although these combinations were absolutely essential to the best development of the country, the railroads were obliged, in order to accomplish them, to evade the laws. This is as much responsible for the spirit of lawlessness



in the management of the transportation interests of the country as any other one thing; and I am sure that, if this condition exists (and I fear we must all admit that it does), we, the lawmakers cannot escape our share of responsibility.

The railway is merely the agent of the government—the agent of the state as to purely state commerce and the agent of the nation as to interstate and foreign commerce; and the government has the power to fix the compensation, in the shape of rates on freight or the rate of dividend which the agent shall receive on his investment. It can fix this compensation in the form of tolls, or it can fix it in gross, and all that it must avoid is legislation of a confiscatory nature. I think, therefore, the reasoning is conclusive that, inasmuch as the state can legislate only for state commerce, it cannot legislate and ought not to attempt to legislate upon this great question of merger, which is only entered upon for the purpose of promoting interstate and foreign commerce; but that this can only be wisely accomplished by the action of the Congress of the United States, in which every state in the Union is represented, and in which every citizen has a voice and vote.

I am more and more impressed with the importance of the whole problem and with the necessity of preparing a broad and comprehensive plan for the improvement of our waterways and also for their co-ordination with the railway system of the country. Such a system of waterways, involving ultimately the highest development of forestry, of irrigation, of swamp land reclamation, of clarification of streams, and of bank protection as efficient means of maintaining a channel for navigation, would relieve vastly the existing congestion of transportation. The perfection of the transportation system of the country will, in my judgment, involve the creation by the nation of common carriers which will own not only great trunk lines of railway, but also lines of steamers on the lakes, the rivers, and the ocean. Combination is an essential part of the economic development of transportation. A perfect system involves, as far as possible, one control from shipper to consignee; and this can only be accomplished by great transportation lines operating regardless of state or national boundaries, which will utilize the railways, the rivers, and the ocean, by methods of carriage adapted to each.

*A Comprehensive Measure*

It is with such considerations in view, and for the purpose of effectually co-ordinating the transportation interests of the country, both waterway and railway, that I have introduced in the present Congress another measure known as Senate Bill No. 499. In framing this act, I have not urged the national incorporation of all railways, many of which lie entirely within the boundaries of a single state, but confine it simply to the construction of interstate railroads and to the combination of interstate railroads, already constructed, into great systems. As to existing roads, this can only be done with the acquiescence of the states. Some states might attempt to withhold their consent, but they would, in my opinion, soon yield when they found themselves outstripped by their more obliging neighbors. There are other ways of proceeding, but I should prefer persuasion to anything savoring of force; and when I speak of force, I do not, of course, mean actual coercion or the violation of the sovereignty of any state, but the prevention, for instance, of any corporation not under national charter from engaging in interstate transportation—a course unquestionably within the power of the nation.

The bill provides for the incorporation, under national law, of carriers, whether by rail or by water, engaged in interstate and foreign transportation, with a provision for the acquisition, with the consent of the states affected, of state-incorporated roads now in existence. The Interstate Commerce Commission is given full control over the capitalization, rates, dividends, and other incidents of the operation of such corporations. When promoters desire to construct a new line of interstate railroad, or to combine old lines into one system, they will be brought before this body of the highest intelligence, character, and efficiency, and present their plan; the amount of bonds they are to issue and the rate of interest, the amount of preferred stock and the rate of interest, the amount of common stock and the rate of interest, and the expenses of promotion; and, upon the approval of the commission, the consent of the nation will be given only after the most careful scrutiny and consideration and the genuineness of the whole transaction viséd by the government itself.

The bill also lays down a uniform method of taxation by the

states, and one per cent of the gross receipts is set aside annually as a special fund in the treasury of the United States for an insurance fund to the employees of the railroads against accident and liability. Dividends in any one year are limited to 7 per cent, except with the consent of the Interstate Commerce Commission, and any surplus goes to the betterment of the roads, or to a guaranty fund against future inadequacy of earnings for dividends, or to extra dividends if the commission consents. In fixing rates and dividends, the Interstate Commerce Commission are directed to have regard, as far as possible, to the maintenance of the par value of the stock. There is a provision for the Interstate Commerce Commission to act as a board of conciliation in the settlement of disputes between the railroads and their employees, on questions of hours, and of conditions and compensation of labor. It is stipulated that there shall be no interference with the local police regulations of the states, or with their regulation of purely state traffic, or with the jurisdiction of the state courts.

We welcome, therefore, the national consideration of all these questions relating to the inland waterways, because it opens up the greater question of transportation, regardless of state lines, by both rail and water, and because its very consideration will bring about a fuller exercise of the granted powers of the constitution. It seems to me peculiarly fortunate that this question of the improvement of the inland waterways has come up and arrested public attention as it has done, because, once public opinion is created, legislation will speedily follow. The whole question of transportation in all its branches will be opened up and intelligently discussed, and we may be able to incorporate in our legislation regarding the waterways some much needed legislation relating to the national incorporation of carriers whether by water or rail or both, and thus weaken the opposition of those who would prevent the co-ordination of the whole matter comprehensively, by indicating to them that the national powers regarding interstate and foreign transportation will not be exercised piecemeal or with reference to the one class of transportation and not with reference to the other.

If a proper system were created, most of the evils now complained of would disappear. A system of transportation could be easily devised which would enlist the best powers of the national

government without infringing at all upon the powers of the states—one which would protect alike the railway investor, the railway employee, the shipper and the public in their respective rights, and at the same time protect the states in all their legitimate powers, and change the hostility of the railways toward the waterways into friendliness and co-operation, in the interest of the entire people.